

## CLAIMS

What is claimed is:

1. A deep brain stimulation system comprising:  
a cannula having a lumen and a slit along its length;  
an elongated medical device dimensioned to be insertable within  
the cannula lumen; and  
a lock for securing the elongated medical device through the  
cannula slit, wherein the lock is fastened to a reference platform.
2. The system of Claim 1, wherein the reference platform is attached  
to a stereotactic frame.
3. The system of Claim 2, wherein the elongated medical device  
further comprises an offset portion.
4. The system of Claim 3, wherein the lock is capable of securing the  
offset portion of the elongated medical device.
5. The system of Claim 3, wherein the elongated medical device  
includes a lumen along its length, wherein the lumen of the elongated medical  
device does not continue through the offset portion.

6. A deep brain stimulation system comprising:
  - a cannula having a lumen and a slit along its length;
  - a lead dimensioned to be insertable within the cannula lumen, said lead having a lumen;
  - a lead lock for securing the lead through the cannula slit, wherein the lead lock is fastened to a reference platform; and
  - a microelectrode dimensioned to be insertable into the lead lumen.
7. The system of Claim 6, wherein the reference platform is attached to a stereotactic frame.
8. The system of Claim 7, wherein the lead further comprises an offset portion.
9. The system of Claim 8, wherein the lead lock is capable of securing the offset portion of the lead.
10. The system of Claim 8, wherein the offset portion further comprises a paddle electrode connector.
11. The system of Claim 8, wherein the paddle electrode connector is capable of forming an electrical connection with an operating room cable, which cable is capable of connecting to an external trial stimulator.
12. The system of Claim 8, wherein the lumen of the lead does not continue through the offset portion.

13. The system of Claim 8, wherein the cannula and microelectrode are capable of removal from the presence of the lead and the lead lock without disturbing the position of the lead when the lead is secured by the lead lock.

14. A method for securing a lead in a deep brain stimulation system comprising the steps of:

providing a cannula with a slit;

providing a lead inside the cannula, the lead having an offset portion; and securing the offset portion of the lead through the slit using a lead lock.

15. The method of Claim 14, further comprising the step of fastening the lead lock to a reference platform of a stereotactic frame.

16. The method of Claim 15, the offset portion of the lead further including an electrode connector.

17. The method of Claim 16, wherein the step of securing comprises clamping the lead lock to the lead.

18. The method of Claim 16, wherein the step of securing comprises pinching the lead with the lead lock.

19. The method of Claim 16, wherein the step of securing comprises suturing the lead to the lead lock.

20. The method of Claim 16, wherein the step of securing comprises piercing the lead with the lead lock.